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September 5, 2017

BY E-MAIL and FIRST CLASS U.S. MAIL

The Honorable Scott Pruitt
Administrator, U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: AES Puerto Rico LP Response to August 25, 2017 Letter From Senator Richard Blumenthal to Administrator Pruitt

Dear Administrator Pruitt:

On behalf of AES Puerto Rico LP ("AES-PR"), I write in response to the August 25, 2017 letter to you from Senator Richard Blumenthal (D-CT). In particular, I write to clarify the facts, the law, and the science surrounding the current beneficial use or disposal in Puerto Rico of Agremax, the aggregate we manufacture from non-hazardous coal combustion residuals ("CCR") produced at our coal-fired power plant in Guayama. As explained further below, there is no need for EPA to review the use of Agremax in lined, state of the art municipal solid waste landfills ("MSWLFs") in Peñuelas, Puerto Rico.

AES-PR is committed to the lawful and safe use of Agremax in Puerto Rico. Both the U.S. EPA and the Puerto Rico Environmental Quality Board have already considered the issues posed by Sen. Blumenthal and decided that placing Agremax in permitted, lined MSWLFs located in Puerto Rico that meet the requirements of subtitle D of the federal Resource Conservation and Recovery Act ("RCRA") and comply with applicable Commonwealth law, would be fully protective of public health and the environment. Moreover, under RCRA, EPA has authorized EQB and approved its plans to implement RCRA on the island. There is no reason for the federal government to do anything more at this juncture – other than to strongly support the considered judgment of EQB that squares fully with the requirements of RCRA and the direction the EPA itself has already given.

Accordingly, we respectfully urge you to advise Sen. Blumenthal that the investigation he has requested is not warranted in this instance.

I. AES Puerto Rico and the Current Beneficial Use of Agremax

AES-PR is a leading provider of low-cost electricity for Puerto Rico. It owns and operates a state-of-the-art, coal-fired electricity generating facility located in Guayama, with a

generating capacity of 454.3 megawatts (net). At a cost of \$800 million, AES-PR is one of the largest private infrastructure investments in the history of Puerto Rico. The plant has over 110 employees and contributes upwards of \$100 million to the island's economy each year.¹ This contribution is critical, particularly given the dire economic situation imperiling our island.²

The AES-PR plant includes state-of-the-art emission controls, using circulating fluidized bed technology, which allows it to produce lower NO_x emissions. In addition, the action of the fluidized bed when mixed with limestone or other sulfur-absorbing materials greatly reduces SO₂ emissions. EPA authorized these and other emission-controls as best available control technology under the Clean Air Act.³ AES-PR is also a “zero liquid discharge” facility, as all process water from operations is recycled or reused.

The Commonwealth government, through the Puerto Rico Electric Power Authority (“PREPA”), distributes all electricity in Puerto Rico. AES-PR operates under a Power Purchase Agreement (“PPA”) with PREPA. Under the PPA, PREPA purchases the power from AES-PR and then distributes it through the Puerto Rico grid. AES-PR represents approximately 17% of all of the electricity consumed on the island and has been the lowest cost, most reliable source of baseload power for Puerto Rico since it started commercial operations in November 2002.

In the course of providing this essential electricity to the citizens of the island, like all coal-fired power plants, AES-PR produces CCR in the form of fly ash and bed ash. AES-PR uses much of its CCR to produce its manufactured aggregate, which it markets as Agremax. To produce Agremax, AES-PR mixes and hydrates the fly and bed ash in an on-site mill, and the resulting mixture is then compacted and cured. This process of hydration, compaction and curing physically converts the CCR into a manufactured aggregate.

AES-PR's aggregate has multiple beneficial uses, including the stabilization of non-hazardous liquid wastes before those wastes are disposed of in a landfill. This provides a valuable functional benefit, because the high lime content of Agremax makes it a very effective stabilizing agent. Moreover, this use substitutes for the use of a virgin material, as the alternative for the landfill would be to excavate large volumes of virgin soil. Using Agremax to stabilize non-hazardous liquid wastes is the only beneficial use of Agremax presently approved by EQB – and AES-PR has contracts with lined, subtitle D landfills to deliver Agremax for use as allowed by EQB. Those landfills also have approval from EQB to receive Agremax for disposal.

¹ See INFORME DE AUDITORÍA CP-10-02 4 de agosto de 2009 AUTORIDAD DE ENERGÍA ELÉCTRICA DE PUERTO RICO (Unidad 3075 – Auditoría 12867) *available at* http://www.ocpr.gov/informes_en_PDF/pdf_2009_2010/cp/CP-10-02.pdf.

² https://www.nytimes.com/2017/05/03/business/dealbook/puerto-rico-debt.html?_r=0

³ See W. Muszynski, EPA Region 2 to S. Slusser, AES Puerto Rico, Prevention of Significant Deterioration Permit for the Proposed AES Puerto Rico Cogeneration Plant (AES-PRCP) Administrative Permit Modification (Oct. 29, 2001), *available at* <http://www.epa.gov/region2/air/permit/AES10292001.pdf>. The Facility also has a Clean Air Act Title V Operating Permit issued by the Puerto Rico Environmental Quality Board. See Puerto Rico EQB, Title V Operating Permit No. PFE-TV-4911-30-0703-1130 (Nov. 15, 2011), *available at* <http://www2.pr.gov/agencias/jca/Documents/Permisos%20y%20Formularios/Calidad%20de%20Aire/Permisos%20de%20Operaci%C3%B3n%20T%C3%ADtulo%20V%20Finales/AES%20FINAL%20Permit.pdf>.

As EPA well knows, beneficially using and disposing material like Agremax is a common, every day practice. Indeed, each year about 110 million tons of CCRs are produced in the United States, and almost half of that material is used in industrial applications or put to other beneficial uses. EPA's CCR Rule, 80 Fed. Reg. 21302, 21303, 21309 (April 17, 2015) ("As of 2012, CCR beneficial uses (i.e., industrial applications) involved about 52 million tons annually").⁴ Most recently, in its 2015 CCR Rule, EPA reviewed and decided to renew its multi-decade support for the beneficial use of CCR, within defined parameters. *See* 40 C.F.R. § 257.53 (definition of "beneficial use of CCR").

II. EPA need not conduct the inquiry Senator Blumenthal has requested

A. EPA and the Puerto Rico EQB have already approved the use or disposal of Agremax in subtitle D landfills like the Peñuelas Valley Landfill

Sen. Blumenthal suggests that using Agremax at "local landfills, such as in the Peñuelas Valley Landfill" warrants an investigation by EPA. There is no basis for the agency to conduct the review the inquiry Senator Blumenthal has requested. In fact, the most productive use of EPA resources would be to reaffirm the agency's previous decisions and use its considerable authority to educate the public on how the use or disposal of Agremax at the Peñuelas Valley Landfill and other qualified landfills in Puerto Rico is fully protective of the public. We urge EPA to do so.

The reason is very simple: The Peñuelas Valley Landfill is a lined landfill designed to comply with the MSWLF requirements of RCRA Subtitle D that has been permitted by EQB. As EPA well knows, RCRA subtitle D landfills are state of the art, lined landfills with leachate collection systems and groundwater monitoring programs that are reviewed and approved by authorized state agencies, like EQB. After years of study, contrary to Sen. Blumenthal's suggestion that Agremax presents "potentially deadly toxic exposure," EPA determined in its 2015 CCR Rule that CCR are *not* hazardous waste and may be used or disposed of in subtitle D compliant landfills. Specifically, EPA approved placement of CCR in CCR landfills designed with liners and leachate collection based on the existing standards for MSWLFs. It also clearly and unambiguously found that placement in MSWLFs was equally protective: "EPA has concluded that disposal of CCR in MSWLFs is as protective as disposal in a CCR landfill ..." EPA 2015 CCR Rule, 80 Fed. Reg. at 21341.

Even before that, in August 2014, EPA's Region II Regional Administrator during the Obama Administration – no friend to coal-fired power production – specifically found that AES-PR's Agremax and CCRs could and should be placed in subtitle D landfills in Puerto Rico. At issue at that time was whether AES-PR's PPA, which had not allowed disposal on-island, should be amended to allow for disposal of CCRs and Agremax in Puerto Rico. EPA's Regional Administrator concluded that "EPA believes that such a prohibition" of on-island disposal "is not

⁴ See also Proposed Rule, Hazardous and Solid Waste Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals from Electric Utilities, 75 Fed. Reg. 35,128, 35,254 (June 21, 2010); Notice of Regulatory Determination on Wastes from the Combustion of Fossil Fuels, 65 Fed. Reg. 32,214, 32,229 (May 22, 2000); Final Regulatory Determination on Four Large-Volume Wastes from the Combustion of Coal by Electric Utility Power Plants, 58 Fed. Reg. 42,466 (Aug. 9, 1993).

necessary.” Letter from Regional Administrator J. Enck to L. Velez Velez, EQB Chairman and J. Flores Executive Director of PREPA (Aug. 14, 2014) (Exh. A). EPA went further, and directed that “An appropriate disposal option needs to be available for the material” and that “AES's CCRs *in Puerto Rico* should be [placed] in a composite lined, permitted landfill that complies with the regulations established in 40 CFR Part 258 under Subtitle D of the Resource Conservation and Recovery Act, 42 U.S.C. § 6901...” *Id.* (emphasis added). This is exactly what is happening – Agremax is being delivered to landfills in Puerto Rico that meet the requirements of RCRA. Unfortunately, some residents in Puerto Rico have attempted to prevent this lawful activity by engaging in illegal conduct, such as blocking public roads and throwing rocks at the windshields of delivery-trucks. That illegal conduct is what the public authorities ought to be investigating and discouraging, not the lawful use of Agremax in RCRA-compliant landfills.

Relying on EPA’s direction, EQB exercised its authority under the Commonwealth’s Environmental Public Policy Act (and regulations adopted under that Act) to regulate the beneficial use and disposal of CCRs in sanitary landfills. Specifically, following EPA’s August 2014 letter, EQB issued a resolution that (i) classified CCRs as non-hazardous and (ii) generally restricted the beneficial use or disposal of CCRs to Subtitle D qualified landfills authorized by EQB to beneficially use or dispose of CCR, but also (iii) created a process for EQB to evaluate and approve proposals for the beneficial use or disposal of CCR in Puerto Rico. *See In re AES Puerto Rico LP*, EQB Resolution No. 14-27-20 (Aug. 27, 2014). After considering the applications of two landfills, in October 2015, EQB specifically approved both the beneficial use and/or disposal of AES-PR’s CCRs in specific landfills located in the municipalities of Peñuelas and Humacao, including the Peñuelas Valley Landfill. *See In re Peñuelas Valley Landfill and El Coquí Landfill Co., Inc.*, EQB Resolution No. 15-23-1 (Oct. 15, 2015). This approval expressly included the use of CCR and Agremax to solidify liquid waste. *Id.* at 7 (confirming that using Agremax “is authorized as a material for the solidification process at the Peñuelas LFS in addition to the use of the CCR, which has been already authorized.”). EQB later authorized a third subtitle D landfill to accept CCRs and Agremax from AES-PR. *See EQB, Permit to Operate Ecosystems Facility for Final Disposal of Non-Hazardous Solid Waste* (Jan. 15, 2016).

Moreover, courts have reviewed EQB’s authority to take these actions – and repeatedly found that EQB is fully empowered to authorize the use or disposal of CCR and Agremax. *See AES Puerto Rico LP v. Marcelo Trujillo-Panisse*, No. 16-2052 (1st Cir. May 16, 2017) (finding “the EQB’s authorization for particular uses and disposal of CCRs in the Humacao landfill and the two Peñuelas landfills preempts the bar on any such uses and disposal imposed by the challenged municipal ordinances.”), *citing Autonomous Mun. of Peñuelas v. Ecosystems, Inc.*, No. CC-2015-0325 (Supreme Court of PR, Dec. 19, 2016) (EQB “is the agency in charge of determining the form and manner in which to install, operate and maintain facilities for the final disposal of solid waste, for which it approves construction permits in accordance with its public policy.”); *Municipality of Peñuelas v. Peñuelas Valley Landfill, Inc.*, Civ. No. JPE2015-0415 (June 24, 2016) (strikes down local law restricting use or disposal of Agremax at Peñuelas Valley Landfill as EQB had expressly authorized the use and disposal there). As Sen. Blumenthal notes, the Puerto Rico legislature has enacted legislation (Law 40-2017) that specifically allows the beneficial use of CCR, and does not restrict the use or disposal of Agremax. A local court considering the issue agrees – the Court of First Instance in Ponce has confirmed that Law 40 does not prohibit the use or disposal of Agremax, that beneficial uses include the solidification of liquid waste, and that

the EQB is the responsible expert agency. *See Comité Pro Salud v. Junta de Calidad, et al.*, Civ. No. J PE17-0289 (Aug. 4, 2017).

B. The 2012 leaching results are inapplicable.

Sen. Blumenthal refers to 2012 testing of the alleged leaching behavior of Agremax, as well as other data. He then makes four points, none of which warrants the action by the agency requested by the Senator.

First, AES-PR disputes the validity of the 2012 data and the comparisons drawn from those data, which Vanderbilt researchers included in a report that used a new “LEAF” testing protocol at the direction of EPA’s Region 2 enforcement office. EPA enforcement officials asked researchers to prepare the report, even though EPA had no guidelines on how to interpret or use the results. To date, EPA still has not approved the method for any regulatory purpose and still has not published any guidelines for how to use and interpret the results. Further, as EPA knows, the approved regulatory test for placing material in a landfill is the Toxic Characteristic Leaching Procedure (TCLP). AES-PR has repeatedly demonstrated that Agremax passes the TCLP – meaning that in a landfill environment, Agremax does not leach metals or any other substance above the thresholds EPA has determined by regulation to be relevant.

Nevertheless, according to Sen. Blumenthal, the 2012 LEAF test found circumstances in which chemicals can leach from Agremax at levels that surpass minimum U.S. national drinking water requirements. However, that conclusion relies on the misleading and selective analysis and presentation of data in the report, which AES-PR has rebutted. In particular, in 2013, AES-PR showed the EPA:

- The report fundamentally misused the data. The report compared maximum values from selected data produced under laboratory conditions to certain reference concentrations without considering the actual, real-world conditions where Agremax would be placed.
- The report improperly chose reference concentrations. It likewise did not consider the real-world conditions or actual pathways to which persons could theoretically be exposed in selecting the reference concentrations to compare.
- The Agremax leaching results do *not* show a risk. To the contrary, when the conditions in the real world are factored in, the data show that Agremax does not present a risk to human health and the environment.

See Letter from S. Boxerman to G. Nurkin (Jan. 10, 2013) (attached, Exh. B). After AES-PR submitted its rebuttal, EPA never responded or challenged any aspect of AES-PR’s critique.

Regardless, these leaching data are irrelevant. As noted, the only beneficial use of Agremax currently approved by EQB requires putting the Agremax in a lined landfill with a leachate collection system. There is no evidence that any of the metals are leaching out of the landfills at any levels much less levels that could pose a harm to the public. In fact, EPA considered these and other LEAF data in its extensive risk assessment for the 2015 CCR Rule – and still approved placing CCR in MSWLFs as fully protective of human health and the environment. *E.g.*, 80 Fed. Reg. at 21321-22 (noting LEAF data and stating its “2014 risk assessment incorporates these new data”).

Second, the Senator states that CCR contains a number of toxic chemicals that have been linked to health effects and that “improper management of ... Agremax can result in leaching from a disposal site, posing a threat to human health and the environment.” The metals in CCR are present at low levels and naturally occurring.⁵ Moreover, in its CCR Rule, which EPA issued after years of debate and analysis, the agency acknowledged that CCRs contain metals but nonetheless recognized that subtitle D landfills could use CCR as daily cover and imposed no new requirements on its use for that purpose. 80 Fed. Reg. at 21341. It likewise approved the use of CCR for road construction and as structural fill, within defined parameters. *See* 40 C.F.R. § 257.53, *supra*. In addition, as noted above, the agency also determined that CCRs could be disposed in Subtitle D landfills such as those in Puerto Rico. *See* EPA 2015 CCR Rule, 80 Fed. Reg. at 21341 and Letter from J. Enck, *supra*. Sen. Blumenthal has offered no reason for EPA to rethink its considered analysis.

Third, Sen. Blumenthal asks EPA to “review action being taken to address this issue by the Puerto Rico government,” and “to ensure that any existing incidents” are addressed, as well as asking “what is being done to monitor leachates and potential contaminants around landfill and construction sites, and who is responsible for conducting and paying for such monitoring.” There is no need for EPA to undertake the requested review.

Indeed, as EPA well knows, landfills submit permit applications to state agencies that contain detailed plans for their operations, including leachate collection and ground water monitoring programs. These plans are reviewed by state agencies before landfills may start operations. The Peñuelas Valley Landfill and the other subtitle D landfills with whom AES-PR has contracted to accept Agremax have those plans and are implementing them. As in every state across the United States, the landfills are responsible for collecting and disposing of leachate properly, conducting groundwater monitoring, and reporting the necessary data. The Puerto Rico EQB is tasked with overseeing that. There is no reason offered by the Senator’s letter for EPA to second-guess the job being done by Puerto Rico to oversee these landfills.

Fourth, the Senator also encourages EPA “to determine if AES-PR’s uses of CCR, including Agremax, meet federal requirements, and take appropriate enforcement action...” However, as EPA knows, in December 2016, the Congress chose to amend RCRA to give the states the opportunity to assert primary authority over CCR requirements. As amended, the law authorizes states to develop their own permitting as least as protective as the EPA’s 2015 CCR Rule. The process for developing those plans is still a work in progress, as EPA has only recently published for public comment an interim guidance to guide the states’ planning efforts. EPA, CCR State Permit Program Guidance Document, Interim Final (August 2017), 82 Fed. Reg. 38685 (Aug. 15, 2017). It would be premature for the EPA to seek to invoke its enforcement authority now, particularly when there is nothing to indicate that Puerto Rico is not properly overseeing the beneficial use of Agremax.

⁵ ATSDR, Petitioned Public Health Assessment, Soil Pathway Evaluation, Isla de Vieques Bombing Range, Vieques, Puerto Rico. Agency for Toxic Substances and Disease Registry (Feb. 7, 2003) (discussing background concentrations of metals in Puerto Rico and United States). *Available at*: https://www.atsdr.cdc.gov/HAC/PHA/reports/isladevieques_02072003pr/printview.html (reviewed Aug. 31, 2017).

C. EPA should educate the people of Puerto Rico that using or disposing of Agremax in a Subtitle D landfill is fully protective of the public

Where EPA can use its resources, would be to educate the citizens of Puerto Rico that placing CCR in subtitle D landfills is a common activity throughout the U.S., safe, and fully protective of the public. Over the course of several years, a small group of zealous opponents has sought to take the law into their own hands and prevent AES-PR from delivering Agremax to the Peñuelas Valley Landfill. This has included illegally blocking the access road to the landfill, despite a court injunction prohibiting those illegal acts and multiple arrests of group members and their organizers. Fortunately, the current government in Puerto Rico has made it clear that it will not tolerate these unlawful acts, but the opponents' actions have required the state police to secure access to the landfill with a team of riot police. This has not only imposed additional costs on the government in these difficult economic times – but to limit the protests and the possibility of violence, AES-PR has been forced to deliver material at night, which unnecessarily increases the burdens on AES-PR, the truck drivers and landfill personnel. The illegal actions by a small vocal minority contravene the rule of law, and we speculate that their leadership may have reached out to Senator Blumenthal for his aid. EPA's support for Sen. Blumenthal's request for an investigation would only embolden groups that seek to circumvent the law.

I would be pleased to have the opportunity to discuss this matter with you or your staff.
Thank you for your consideration.

Respectfully,



Manuel Mata
President